

## **REMARKS/ARGUMENTS**

### **I. INTRODUCTION**

Applicants have amended claims 1, 2, 5, 6, 9, 10, 12 and 18. Applicants have also added new claims 20 and 21. Applicants have cancelled claims 3-4 and 17. Claims 1-2, 5-16, and 18-21 are presently pending in this application. Applicants respectfully request reconsideration and reexamination of the application in view of the following arguments and amendments.

### **II. AMENDMENTS TO THE CLAIMS**

Applicants have amended claims 1, 2, 5, 6, 9, 10, 12 and 18 and added new claims 20 and 21. Support for these amendments can be found throughout the specification and drawings. Applicants respectfully submit that these amendments do not add any new matter.

In particular, Applicants have amended claims 5 and 12 in response to the Examiner's objection relating to the word "along" in the claims. Applicants have modified the word "along" to the word "above" in accordance with the Examiner's suggestion.

### **III. OBJECTIONS TO THE DRAWINGS**

Applicants respectfully submit a Replacement Drawing Sheet to address the objection to the drawings under 37 C.F.R. 1.83(a). Amended Figure 2 shows longitudinal axes 75, 77 of axles 14, 16, respectively, and shows the springs 56, 58 centered above longitudinal axes 75, 77, as described in amended claims 5 and 12.

### **IV. AMENDMENTS TO THE SPECIFICATION**

Applicants have amended Paragraph [0023] to include the reference numbers 75, 77 for the longitudinal axes of axles 14, 16 as depicted in amended Figure 2.

### **V. REJECTION OF CLAIM 1 UNDER 35 U.S.C. §102**

Claim 1 stands rejected under 35 U.S.C. § 102(b) as anticipated by Lamela et al. (U.S. Patent No. 7,000,724). Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102(b) has been traversed because Lamela et al. do not disclose or suggest all of the limitations recited in the claim. In re Paulsen, 30 F.3d 1475, 1478-79, 31 U.S.P.Q.2d 1671 (Fed.

Cir. 1994); Verdegaal Bros. v. Union Oil Co. of California, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1997) (“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”).

New independent claim 20 recites: “A vehicle suspension, comprising: a beam extending between and coupled to first and second axles, each of said first and second axles supporting wheels at each end of said axle, said beam having an aperture extending therethrough; a bushing having a central aperture and first and second diametrically opposed voids, said bushing disposed within said aperture in said beam and pivotally coupling said beam to a vehicle frame at a location intermediate said first and second axles; and, first and second springs positioned between said vehicle frame and said beam, said first and second springs disposed above said first and second axles, respectively.” (emphasis added).

Applicants respectfully submit that Lamela et al. do not disclose or suggest all of the limitations recited in new independent claim 20, namely, first and second axles, a bushing, and first and second springs. Lamela et al. at most disclose a vehicle suspension system with two bogies pivotally connected to the sides of the vehicle with a wheel mounted on each end of the bogies. Amended claim 1 depends from new independent claim 20 directly. Therefore, Applicants respectfully submit that the rejection of amended claim 1 under 35 U.S.C. § 102(b) has been overcome and request that the rejection be withdrawn.

#### **VI. REJECTION OF CLAIMS 1-3, 8, 10, AND 15 UNDER 35 U.S.C. §102**

Claims 1-3, 8, 10, and 15 stand rejected under 35 U.S.C. § 102(b) as anticipated by Hickman et al. (U.S. Patent No. 3,936,073). Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102(b) has been traversed because Hickman et al. do not disclose or suggest all of the limitations recited in the claims.

New independent claim 20 recites: “A vehicle suspension, comprising: a beam extending between and coupled to first and second axles, each of said first and second axles supporting wheels at each end of said axle, said beam having an aperture extending therethrough; a bushing having a central aperture and first and second diametrically opposed voids, said bushing disposed within said aperture in said beam and pivotally coupling said beam to a vehicle frame at a location intermediate said first and second axles; and, first and second springs positioned

between said vehicle frame and said beam, said first and second springs disposed above said first and second axles, respectively.” (emphasis added).

Applicants respectfully submit that Hickman et al. do not disclose or suggest all of the limitations recited in new independent claim 20, namely, a bushing having diametrically opposed voids and first and second springs disposed above the first and second axles, respectively. Hickman et al. at most disclose a vehicle suspension system with axles pivotally connected by side walking beams, with springs located at the center pivot of the walking beams. Amended claim 1 depends from new independent claim 20 directly. Therefore, Applicants respectfully submit that the rejection of amended claim 1 under 35 U.S.C. § 102(b) has been overcome and request that the rejection be withdrawn.

At least because claims 2 and 8 depend from independent claim 1, directly or indirectly, Applicants respectfully submit that the rejection of claims 2 and 8 under 35 U.S.C. § 102 is improper and request that the rejection of claims 2 and 8 be withdrawn.

Claim 3 has been cancelled, so the rejection of claim 3 is now moot.

Amended claim 10 recites, “A vehicle suspension, comprising: a beam having first and second spaced side walls and a lateral wall extending between said first and second side walls, said first and second side walls defining first and second recesses proximate first and second ends, respectively, of said beam, said first and second side walls and said lateral wall defining a C-shaped cross-section and open towards said first and second axles; first and second springs positioned between a frame of said vehicle and said beam, wherein said first and second recesses receive first and second axles of a vehicle and said beam is rigidly attached to said first and second axles and pivotally coupled to said frame of said vehicle at a location intermediate of said first and second axles.”

Applicants respectfully submit that Hickman et al. do not disclose or suggest all of the limitations recited in amended independent claim 10, namely, an open channel configuration “defining a C-shaped cross-section and open towards said first and second axles.” Hickman et al. at most disclose a walking beam “of rectangular tubular form in cross section having vertical side walls connected by top and bottom walls.” (Col. 2, lines 11, 13-15). Therefore, Applicants respectfully submit that the rejection of amended claim 10 under 35 U.S.C. § 102(b) has been overcome and request that the rejection be withdrawn.

At least because claim 15 depends from independent claim 10 directly, Applicants respectfully submit that the rejection of claim 15 under 35 U.S.C. § 102 is improper and request that the rejection of claim 15 be withdrawn.

## **VII. REJECTION OF CLAIMS 4, 5, 11, AND 12 UNDER 35 U.S.C. §103(A)**

Claims 4, 5, 11, and 12 stand rejected as being unpatentable under 35 U.S.C. § 103(a) over Hickman et al. in view of Baxter et al. (U.S. Patent No. 6,916,037). Applicants respectfully submit that the rejection of claims 4, 5, 11, and 12 under 35 U.S.C. § 103(a) is improper because the combination of Hickman et al. and Baxter et al. does not teach or suggestion all of the claim limitations and further, there is no suggestion or motivation to combine the teachings of Hickman et al. and Baxter et al. to achieve the structure of the present invention.

“Patent examiners carry the responsibility of making sure that the standard of patentability enunciated by the Supreme Court and by the Congress is applied in each and every case.” MPEP § 2141 (emphasis in original).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

MPEP § 2143. Applicants submit that the combination of Hickman et al. and Baxter et al. does not teach or suggestion all of the claim limitations and further, there is no suggestion or motivation to combine the teachings of Hickman et al. and Baxter et al. to achieve the structure of the present invention.

Claim 4 has been cancelled, so the rejection of claim 4 is now moot.

Claim 5 depends from new independent claim 20 and neither Hickman et al., nor Baxter et al. teach or suggest the claim limitation for “a bushing having a central aperture and first and second diametrically opposed voids disposed within said aperture in said beam and pivotally coupling said beam to a vehicle frame” as positively recited in new independent claim 20.

Furthermore, there is no suggestion or motivation to combine the teachings of Hickman et al. and Baxter et al. to achieve the structure of the present invention. The Examiner acknowledges that Hickman et al. do not teach the springs centered above the axles. The Examiner asserts that it would have been obvious to modify Hickman et al. with the teachings of Baxter et al. in order to provide air springs above the axles “to provide an improved suspension for the vehicle.” Office Action mailed March 6, 2006, p. 5. However, Applicants respectfully submit that there is no suggestion or motivation to modify Hickman et al. to center the springs above the axles.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

MPEP § 2143.01 (citing In re Mills, 916 F.2d 680 (Fed. Cir. 1990)). (emphasis in original).

There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. (quoting In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obviousness was held improper.)

MPEP § 2143.01 (emphasis added)

A motivation to improve a vehicle suspension is not sufficient motivation or suggestion for one of ordinary skill in the art to make the proposed modification. While Applicants acknowledge that an express written motivation does not have to explicitly appear in the references, Applicants respectfully submit that inventors always wish to improve upon existing products and processes, so without some objective reason to combine the teachings of the references (beyond mere improvement), a *prima facie* case of obviousness has not been established.

Claim 11 depends from amended claim 10. As described above, amended claim 10 includes a claim limitation where the beam defines “a C-shaped cross-section” that is “open towards said first and second axles.” Neither Hickman et al., nor Baxter et al. teach or suggest the claim limitation relating to this open channel configuration with a C-shaped cross section

open toward the first and second axes. Baxter et al. disclose walking beams “having a generally I-beam cross-section” and “other configurations (e.g., an elongate member of tubular steel having a rectangular cross section).” (Col. 4, lines 46-51). Furthermore, as described above, there is no suggestion or motivation to combine the teachings of Hickman et al. and Baxter et al.

Because the combination of Hickman et al. and Baxter et al. does not teach or suggest all of the claim limitations and further, because there is no suggestion or motivation to combine the teachings of Hickman et al. and Baxter et al., Applicants respectfully submit that the rejection of claims 5 and 11 under 35 U.S.C. § 103(a) is improper. Accordingly, Applicants request that the rejection be withdrawn.

At least because claim 12 depends from claim 11 directly, Applicants respectfully submit that the rejection of claim 12 under 35 U.S.C. § 103(a) is improper and request that the rejection of claim 12 be withdrawn.

#### **VIII. REJECTION OF CLAIMS 6, 7, 13, AND 14 UNDER 35 U.S.C. §103(A)**

Claims 6, 7, 13, and 14 stand rejected as being unpatentable under 35 U.S.C. § 103(a) over Hickman et al. in view of Raidel et al. (U.S. Patent No. 4,714,269). Applicants rely on their arguments advanced above in connection with new independent claim 20. At least because claims 6-7 depend from new independent claim 20, either directly or indirectly, Applicants respectfully submit that the rejection of claims 6-7 under 35 U.S.C. § 103(a) is improper and request that the rejection of claims 6-7 be withdrawn.

Applicants rely on their arguments advanced above in connection with amended claim 10. At least because claims 13-14 depend from amended claim 10, either directly or indirectly, Applicants respectfully submit that the rejection of claims 13-14 under 35 U.S.C. § 103(a) is improper and request that the rejection of claims 13-14 be withdrawn.

#### **IX. REJECTION OF CLAIMS 9 AND 16-19 UNDER 35 U.S.C. §103(A)**

Claims 9 and 16-19 stand rejected as being unpatentable under 35 U.S.C. § 103(a) over Hickman et al. in view of VanDenberg (U.S. Patent No. 4,911,868). Applicants respectfully submit that the rejection of claims 9 and 16-19 under 35 U.S.C. § 103(a) is improper because the

combination of Hickman et al. and VanDenberg does not teach or suggest all of the claim limitations.

Claims 9 and 18-19 depend from new independent claim 20, either directly or indirectly, and neither Hickman et al., nor VanDenberg teach or suggest the claim limitation for “first and second springs disposed above said first and second axles, respectively” as positively recited in claim 20.

Claim 16 depends from amended claim 10 directly, and neither Hickman et al., nor VanDenberg teach or suggest the claim limitation for “said first and second side walls and said lateral wall defining a C-shaped cross-section and open towards said first and second axles” as positively recited in claim 10.

Claim 17 has been cancelled, so the rejection of claim 17 is now moot.

Because the combination of Hickman et al. and VanDenberg does not teach or suggest all of the claim limitations, Applicants respectfully submit that the rejection of claims 9, 16, and 18-19 under 35 U.S.C. § 103(a) is improper. Accordingly, Applicants request that the rejection be withdrawn.

## **XV. CONCLUSION**

For the above cited reasons, all of the claims presently pending in this application are believed to be allowable. If the Examiner has any further questions or concerns, the Examiner is invited to contact the Applicant’s undersigned attorney.

Respectfully submitted,

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